

Date: Thursday, 18/10/2007 3:25:46 PM  
 User: Linda Lacelle

## Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	STEP WELDMENT	
Job Number	34269		Part Number	D3562041	
Estimate Number	12576		Drawing Number	D3562 UNDER REVIEW	
P.O. Number	N/A		Project Number	N/A	
This Issue	18/10/2007 S.O. No. : N/A		Drawing Revision	A	
Prsht Rev.	NC		Material	N/A	
First Issue	27/08/2007	Type	LARGE FAB ASSY	Due Date	07/09/2007
Previous Run	34026		Qty:	6	Um: Each
Written By					
Checked & Approved By					
Comment	Est Rev:A		New Issue	06-11-09	JLM

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	D2622120C	Extrusion

Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	34694

Check Material for any Dents or Defects

(P10)

6

20	D2734	206 Step Endplate

Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:	Qty	Part Number	Description	Batch:
	2	D2734	End Cap	

3.0 LARGE FAB 1

LARGE FABRICATION RESOURCE



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion as per Dwg D3562

07-10-31

6

2-Deburr/sand bevel ends for welding

3-Weld (1)end cap as per Dwg D3562&amp; QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod

4-Grind end cap welds flush as per Dwg D3562

N/A  
06-11-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
07/11/12	# 60	ADD A step to pre heat the steps to allow for heating end caps after welding before powder coating. 15 min @ 320°C to dry off access hole.					✓ Oluos
07/11/12							

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 18/10/2007 3:25:47 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #: Machine Or Operation:

Description :

4.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

04.11.01 (6)



checked on Heron

5.0 QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

04.11.01 PD 07-11-08 (6)



6.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1



7.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION



07-11-01 (6)

8.0 D3560041

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

ARM WELDMENT 3 34474 = 1

3 35029 = 2



07-11-05 (6)

9.0 D3560043

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

ARM WELDMENT

Batch: 334476



07-11-05 (6)

10.0 MS20600AD4W5

Blind Rivet



Comment: Qty.: 36.0000 Each(s)/Unit Total : 216.0000 Each(s)

Blind Rivet

batch: M106074



07-11-05 (6)

11.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Drill Rivet holes as per dwg D3562.

Touch-up rivet holes with alodine as per dwg d3562

Rivet legs using Magnabond as per dwg D3562.

07-11-05 (6)

07-11-06 (6)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

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## Process Sheet

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Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

Ensure to wipe off any excess magnabond of the step

A/R Magnabond 6398 Batch:

12.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

13.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld Remaining end cap as per Dwg D3562 & QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod

14.0 QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

See Step 5.0

15.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6/11/08

16.0 POWDER COATING

POWDER COATING



touch up iodine pressure wash

Fx 07/11/08

(6)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

4/04-11-07

(6)

17.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3562 and QSI 005 4.4

Batch: m/06030

Fx 07/11/09

(6)

18.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

7/11/12 SO 69

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0 D2808

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)  
Spacer

B 32 8940

~~11/2~~ ~~11/2~~ ~~11/2~~

20.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

~~11/12~~ - MF 07-11-12

21.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

22.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as step weldments only

\*\*do not assemble\*\*

23.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



07-11-06

→ 21.1) pick 2x D2734 end caps (scan & sequence 2.0)  
B 34485 07-11-06

21.2) weld end caps per drawing D3562 & QSI 004.

- Inspect for foreign objects.

Aluminum Rod A/R B M105058 07-11-06

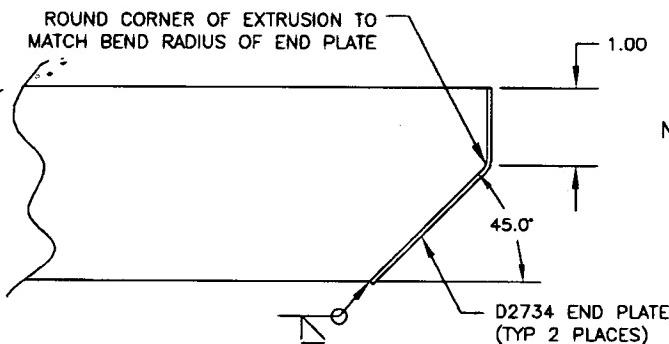
- grind flush 07-11-06

W/O:		WORK ORDER CHANGES				
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr

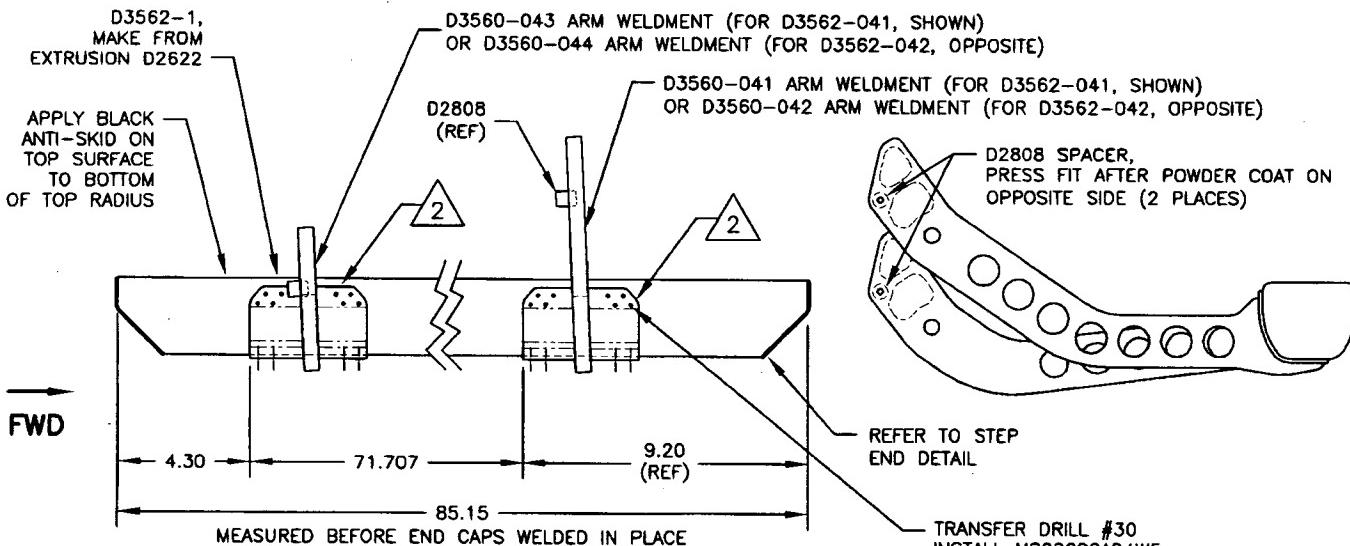
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**TYPICAL STEP END DETAIL**  
NOT TO SCALE



**D3562-041 LH STEP ASSEMBLY (SHOWN)**  
**D3562-042 RH STEP ASSEMBLY (OPPOSITE)**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 3) WELD PER DART QSI 004
- 4) FINISH:
  - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
  - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANTEX (4.3.5.6) OR BLACK SANTEX (4.3.5.7) OR GREEN SANTEX (4.3.5.8) PER DART QSI 005 4.3. TOUCH UP ANY UNFINISHED MAGNOBOND WITH PAINT PER DART QSI 005 4.2
  - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED  
07.06.29-4

DESIGN GP		DRAWN BY GP	DART AEROSPACE LTD		
CHECKED		APPROVED	HAWKESBURY, ONTARIO, CANADA		
			DRAWING NO. D3562		
DATE			TITLE	STEP ASSEMBLY	SCALE
07.06.19	A	06.09.26	NEW ISSUE		SHEET 1 OF 1
	B	07.01.15	ARMS NOW RIVETED TO STEP		NTS
	C	07.06.19	NOW MAGBND, ADD D2808, RMV 4 RVTS		REV. C

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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